

ABSTRACT OF THE DISCLOSURE

- In a mobile ad hoc network node first exchange their node sets of one-hop neighbors, thereby learning their sets of two-hop neighbors. A one-hop neighbor is a node in direct radio range of a source node. A two-hop neighbor node is one which, while beyond direct radio range of the source node, is in direct range of at least one of the source node's one-hop neighbor. Thereafter, each node selects a subset of its one-hop neighbor nodes, called the multi point relay (MPR) set, such that the subset can cover all the two-hop neighbors when forwarding broadcast traffic from that node. Outside the two-hop region, routes are discovered on a demand basis by flooding. However, flooding traffic is reduced because only the subset, instead of all one-hop neighbors, participates in forwarding.